

Lesson Preparation Book Computer

2nd.Sec - First Term 2023 - 2024



جروب فريق أصدقاء الكمبيوتر المتخصص - Prepared and Designed by/ Yasmin Shoaeh



Teacher's Biography

Name:
School:
The educational administration:
Qualification:
Teaching Subject:
Comprehensive School:
The school to which he is delegated:
Date of appointment:
The job is on the staff:
Teacher Code:
Mobile Number:
Teacher Supervisor School Principal



Daily class schedule

Session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

Session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

Teacher	Supervisor	School Principal



The General Objectives of Computer

At the end of the First term the student will be able to:

- ➤ Know some of the concepts of operations related to infrastructure for computer systems, databases, programming languages of creating Web pages, and secure web sites, etc.
- ➤ Know some basic concepts and processes related to applications and services of information and communication technology.
- ≥ Understand some aspects of intellectual security (human and moral and social) and the security of information related to the use of information and communication technology.
- ≥ Use production technology tools (HTML & PHP & SQL) in the support and development of education.
- > Produce the project of "Illustrated Dictionary of computer terms" using the processes and programs and technological tools.
- Employ technological tools of communication in the exchange of content, communication and interact and cooperate with others to support learning
- The use of technological tools and resources in dealing with information and data, electronic processing and evaluating and reporting the results.

Teacher	Supervisor	School Principal



The specified objectives of computer

At the end of the First term the student will be able to:

Show some advanced scientific concepts and terms related to the computer.

Employ computer programs in the implementation of learning tasks.

Employ network of Internet services in the teaching and learning processes.

Practice searches for all forms of electronic information on the computers and networks reliable in solving the problem of information.

Suggest simple projects to employ the applications and information and

Communication technology services in the fields of study and life.

Employ information and communication technology applications in exchange projects' tasks.

Employ some of desktop programs and applications (Worksheets – Data

Bases..) in producing specific tasks within educational projects.

Employ several programs to solve educational and life problems.

Design suitable data base for his project.

Practice PHP programming skills.

Use some of Internet applications in the implementation of his project.

Design interactive Web pages for his project.

Link the interactive Web pages with Databases.

Produce a project using advanced Internet applications.

Identify HTML language and PHP and its applications in web design.

Practice dealing with electronic information skills (identifying – evaluating – selecting – organizing.)

Employ electronic information sources associated with a specific project in the implementation of the project.

Learn some of the transactions related to PHP language.

Learn some of the concepts and formulas related to the IF and Switch statement.

Teacher	Supervisor	School Principal

Date			
Session			
Class			





Learning Objectives:	Strategy
By the end of the lesson, the student should be able to:	Brain storming - Dialogue and discussion
 Recognize some basic concepts and terminology associated with creating a Web site dealing with 	Corporative learning
databases.	Teaching aids
 Distinguishes static web and dynamic web pages. 	Electronic board - Student's Book - presentation
 Practice preparing computer operations to become a SERVER. 	piocontación

Warm up / What are the types of web sites?



During the implementation of the "Illustrated Dictionary of computer terms" you should recognize some important basic concepts that we are going to use

- 1- Freeware Programs:-They are the programs whose owner allows others to use them free of charge or with written permission from him.
- 2- Open Source Programs:-They are the programs and published applications that give users access to the code, the possibility to modify, develop it in the light of the needs of its developers, and republish or use it after the amendment.
- 3- Static Web Page:-It is an Information page that is displayed through one of the Internet browsers. It can be saved along .htm, .html page.
- 4- Dynamic Web Page:-It is an information page available on the Internet. It can be written in PHP or ASP.net.
- 5- Server:-The term is intended to two different meanings:
- 1. Hardware Server: which is the highest powerful computer network. (It's the computer Hardware Server in a computer network.
- 2. Software server: which is as a task or role run in the network.
- 6- Script:-It is a sequence of instructions or code written in one of Web pages languages customized for web pages to perform a task or to process some of the data.
- 7- HTML" Hyper Text Markup Language: -It's the language used to create the Static Web Page. This page can be saved along .htm, and displayed through one of the Internet browsers.
- 8- The language of PHP "Personal Home Page":-It's one of the specialized languages in developing dynamic web sites. It's a free open source language characterized by ease, speed, and operates the Server Side Language. Its own code can be included within the HTML code, and can easily connect different data bases safely.
- 9- Apache Server:-This program is used with Server devices or simulates your personal computer to act as Server device.
- 10- Publishing Web Site:-There are two ways to publish a site:
- 11- SQL "Structured Query Language":- It's a programming language used in all operations of database.
- 13- "Web Server Packages":- for example, Web applications package LAMP (Linux Apache MySQL PHP), The essential difference between the previous web applications packages is the operating system you are working with.
- 14- Session:-It's a way to store information about the user (visitor of the website) in order to make it available for use across the pages of the site.

Evaluation: -

Complete: The essential difference between the previous web applications packages is.....

Date			
Session			
Class			



"Illustrated Dictionary of Computer Terms"



Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Brain storming - Dialogue and discussion	
Determine required tasks to create a web site.	Corporative learning	
Plan the main page of a web site.	Teaching aids	
Load XAMPP program to run MySQL and Apache applications.	Electronic board - Student's Book - - presentation	

Warm up / What are the tasks to be implemented in creating the site?



- Aim of project: Designing and creating site of "Illustrated Dictionary of computer terms by using free or open source programs and applications.
- The importance of the project: lies in making you practice writing your PHP code of dealing with MySQL through web site pages.
- \triangleright The tasks to be implemented in creating the site of, "Illustrated Dictionary of computer terms":
- **Solution** Configuring the suitable environment for creating a site.
- ® Creating database for saving the data of terms dictionary that are inserted or modified through web pages.
- Designing the main page
- Adding a term in Arabic and English, term scientific definition and a picture referring to a term and saving it in database.
- Searching for a term in database.
- Deleting a term in database
- Modifying a term data in database.
- **Providing the required help on how to deal with the site.**
 - > Steps to create web site:
- 1. Configure the appropriate environment to create web site by the following:
 - Set up programs (apache and xampp).
 - Save web page files in server and display in one of internet browsers.
 - > Prepare personal computer to be server.
- 2. Implementation of project (terms dictionary) by 3 steps
 - Create of database (my SQL and access).
 - > Create static web page using html code and expression web.
 - > Convert static web page to dynamic web page by using php inside html code.
 - And finally we display web sites by using internet browsers such as :

Internet explorer - Firefox - google chrome.

Notes:

We save information of web pages in server by one of the following:

- Web sites with cost by booking web site in one of host servers.
- Without cost by one of free internet sites which allow hosting web site.
- Publishing web site locally.

Evaluation: -

Complete: We save information of web pages in

Date			
Session			
Class			





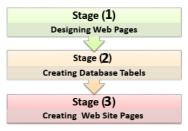
Lesson 1: Design Web page

Learning Objectives:	Strategy
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and
 Design the home web page for the Computer Terminology Dictionary site. Determine the necessary navigation links between 	discussion Teaching aids
pages of the site. Discuss with his collogues several proposals for the	Electronic board - Student's Book - - presentation
design of the project pages.	

Warm up / What are the stages of creating a web site?



Producing the "Computer Terminology Dictionary" project passes through a number of stages as follows:



Stage 1: Designing Web Pages

This is the first stage of the implementation of the project, in which the project' web pages, the name of each page, the purpose, and its content will be determined. Also we will define a proposal for designing the main page components and the Hyperlinks used in web pages navigation and return back to home page, Good design of the site before the beginning of creation, it saves time and effort, also helps in producing special and professional site.

The following figure shows a proposal for designing "Photographer Computer Terminology" Dictionary site' pages:-

- Index.php
- Connection.php
- Header.php
- Add_Term.php
- Search_Term.php
- Edit_Term.php
- Del_Term.php
- Help.php

To avoid writing code in all the site pages are as follows:

- 1. Separate the image Banner and Hyperlinks in a separate page that is called in the beginning of each page.
- 2. Separate connects code to the database in a separate page that is called at the beginning of each page.
- 3. Image that appears at the beginning of each page called Banner
- 4. All Hyperlinks that we use to navigate between pages of the site are: (Main Add term Search term Edit Delete Help).

Evaluation: -

Complete: is the first stage of the implementation of the project.



Prepared and Designed by/ جروب فريق أصدقاء الكمبيوتر المتخصص -Yasmin Shoaeb

Date			
Session			
Class			

Unit 2: Requirements and production stages of the project

Lesson 2: Create a Database

Records (صفوف) (Rows



حقول Fields

اعدة Columns)

Y . . Y/E/Y

نکر

Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and	
Recognize some basic concepts related to databases.	discussion	
 Create a database of the project "Photographer Computer Terminology Dictionary". 	Teaching aids	
Practice linking databases operations.	Electronic board - Student's Book presentation	

Warm up / What are the different between database and table?



The second stage in the construction phase of the "Photographer Computer Terminology Dictionary" project database, and before starting, must be identified on some of the basic concepts of databases.

1- Database: - is a store or save a set of structured data associated with a particular subject in order to restore it to make decisions.

- 2 Tables: represents infrastructure or the main component of the database, and consists of Records and Fields.
- 3- Records: A row of data table containing all the data for only one person or one case.
- 4- Fields: is the infrastructure that makes up the data table, any column in a table is a field, and the field contains only one statement for each record of the table records.

Each field has many of properties including: Field Name - Field Data Type -

Field Size: It is the number of digits or characters in the case of the text field, or select the type of numbers entered in the case of the numeric field (Integer – contains a Decimal – etc).

- ✓ You can create database that consists of <u>only one table</u> containing all the necessary fields and in this case the table is called "Flat Table".
- √ The matter requires creating relations between the database tables to each other, so as to avoid
 duplication of data or fields, and in this case the database is called Relational Database.
 - ✓ To ensure the success of the linking process between database tables, <u>you must achieve the following:</u>

(1) Set a "Primary Key":

Or

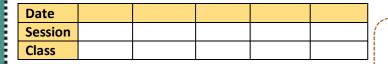
- Set a "Primary Key" field for each table, and that by one of two ways:
 - 1. Select a field from the table fields: the requirement will not be repeated any statement in this field at all, even with the huge volume of data.

2. Add a new field: it is set or allocated as a Primary key field.

Evaluation: -

Complete: is the place "row" where the integrated data are stored into the table.

Prepared and Designed by/ جروب فريق أصدقاء الكمبيوتر المتخصص -Yasmin Shoaeb







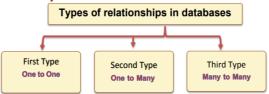


Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and	
Practice linking databases operations.	discussion - Brainstorming	
Classify the relations in databases. Cooperate with his collectives in the execution of	Teaching aids	
 Cooperate with his colleagues in the creation of database tables. 	Electronic board - Student's Book presentation	

Warm up / What are the types of relationships in databases?



→ Determine the types of relationships in databases:



First Type: One to One

A Relationship between two tables, where you can join a record in the first table with only one record of the second table, and vice versa.

The primary key fields in the two tables must be:

- (1) The same Data Type.
- (2) The same size.
- (3) Do not require to be the primary key fields in the two tables have the same name.

"Foreign Key", because it is not of the nature of the table and it is considered an outsider field.

Second Type: One to Many

A Relationship between two tables so that you can join a record in the first table with numerous records in the second table and not vice versa.

- To do link between the two tables in the one many relationships should be added the primary key field in the table One ("classes table") to table Many ("students table"), it is called in this case "a foreign field" (Foreign Key) because it is not of the nature of the table, but it outsider field.
- In the foreign key field (the class number in students table), data can be repeated, and called Controlled redundancy.

Third Type: Many to Many

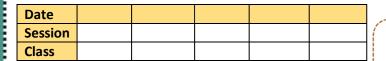
- A Relationship between two tables where one or more rows in a table are associated with one or more rows in another table.
- Many-To-many relationships a theoretical relationship of concepts of databases, and cannot be represented practically in database management programs such as Access - Oracle - MySQL ... etc.
- Database management system include basic Objects such as:

Tables: – Through which we can create database tables containing records and fields, and the possibility of entering, displaying and modifying the data.

Queries: - is a request for information from a database for the purpose of data or information in the tables.

Evaluation: -

Complete: relationship between two tables, both tables have only one record associated







Lesson 1: PHP&HTML languages

Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and	
Practice steps of creating a site using the application	discussion - Brainstorming	
Expression Web. know HTML markup language.	Teaching aids	
Create Web pages with HTML code.	Electronic board - Student's Book presentation	

Warm up / What 'S Hyper Text Markup Language?



→ Create web pages:

Add_term.php: Which is used to add a new term.

Search term.php": The term used in the search for and view its data

Edit term.php: Through which we can modify any statement of a particular term.

Del term.php:through which you can delete a certain term

Help.php: Information on how to deal with the site "Illustrated Dictionary of Computer Terms.

Connection.phppage: to open a connection to the database on the server machine.

•Header. Php page contains the following:

- 1. Banner that is displayed on all pages of the site.
- 2. Hyperlinks to all pages of the site.

HTML: - It's a coding language used to create Web pages that saved with the extension of the .htm or .html so that it can be displayed.

- you can write HTML code using a word processing programs, such as: (MSWord, WordPad, Notepad......)
- The code begins with < Html> and ends with </ Html>
- The command written in HTML coding language is called <u>Tag</u>.
- Each tag has a certain task to perform.
- It is possible to be written in capital or small letters.
- Tags commands in the markup language HTML are placed between two brands<>
- Most of the Tags have a beginning or open <....> and an end or Close
- Some tags don't have a close or an end such as
.
- Save the file in any HTML code name with the extension .htm or .html.
- After saving the file with the previous specifications, it takes Internet browser code available on your computer, such as: Internet Explorer or Google Chrome or Mozilla Firefox Etc...

Evaluation: -

Complete: HTML code/file save as type...........

The structure of a program in HTML

<html>
<head>
<Title>عنوان صفحة المعلومات </Title>

<head>
<body>

المعلومات التي ستعرض على مستعرض الإنترنت

</body>
</html>

Date			
Session			
Class			





Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and discussion - Brainstorming	
Practice steps of creating a site using the application		
Expression Web. know HTML markup language.	Teaching aids	
Create Web pages with HTML code.	Electronic board - Student's Book presentation	

Warm up / What 'S the different between variable and constants?



→ Loading Expression Web program:

From the start menu, select the program Microsoft Expression Web 4 as shown in the following figures:

- (1) Menu Bar
- (2) Folder List
- (3) Tag Properties
- (4) Website component
- (5)Toolbox
- (6) Apply Style
- \rightarrow A Variable: is storeroom in the memory that has a <u>name and type</u> for which we allocate a value to be stored in and its value is <u>changed</u> during the course of the program. <u>For example:</u> \$Total = 450;
- Variable name begins with an."\$"
- Variable name consists of letters, numbers and sign "_" only.
- Variable name should express its content or what it refers to.
- Assignment sign is "=".
- Each sentence ends in PHP sign language;
- -To print any information on the browser screen use Print or Echo, as follows:
- Echo Code can be used to assemble more than a fixed or variable on printing on the browser screen and then separate them by a <u>dot"."</u>.
- → PHP constants in the language: are stores in memory bearing the name and type with an assigned fixed value that does not change throughout the implementation of the program, and can be defined by the following general formula: define ('Constant Name', Value);

For example:

- define ('name', 'Mohamed');
- echo ('my name is: '. name);
- We use a(.) In the second line of the code to link the two literal series.
- We used the constant without the \$ sign.
- Define "is used to define constant.
- Each line in PHP language ends with a semicolon;

Evaluation: -

Complete: The variable's name in PHP language end with.......

Date			
Session			
Class			

Unit 3: Creating Site Pages
Lesson 3: Transactions and
conditional sentences in PHP



Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and discussion - Brainstorming	
Explain If conditional in the language of PHP.		
 Recognize inter Switch in the language of PHP. Employ different formulas of "If" phrases الحديدة Switch 	Teaching aids	
in solving problems.	Electronic board - Student's Book - - presentation	

Warm up / What 'S the meant by operator?



\rightarrow Operators:

(1) Mathematical Operators of two types (normal – other)

Operator	Refers to	Example	Example outcome
+	Addition	3+2	5
-	Subtraction	6-4	2
	Multiplication	5*2	10
/	division	8/2	4
%	Residual of	10 % 3	1

(2) There are other mathematical operators to the PPH language.

Operation	Example	Means
+ =	\$x +=5	x = x + 5
-=	\$x -=5	x = x - 5
* -	\$x *= 5	\$x = \$x * 5
/-	\$x /= 5	\$x = \$x / 5
% =	\$x % = 5	\$x = \$x % 5
++	\$x++	x = x + 1
	\$x-	x = x - 1

(3) compared operators:

Operator	==	!=	>	>=	<	<=
Refer to Equal	Not	Greater	Greater Than	Less	Less Than	
Kelei to	Equal	Equal	Than	Or Equal	Than	Or Equal

(4) Logical Operators: They are symbolized by the following table

Operator	المعنى	
	Or	
OR	5	
&&	and	
AND	allu	
!	Ę.	

IF Condition:

Among the IF condition, by which software developers can develop a particular condition and test it. If the result of the condition is true, the program can implement of specific code, and if the result of the implementation of the condition is not properly, it can have carried out another code.

Switch statement:

Be used as one of the conditional phrases in the language of PHP, from which a number of conditions are checked and each time the condition executes specific code,

Evaluation: -

Complete:is one of compared operators

Date			
Session			
Class			



Unit 3: Creating Site Pages
Lesson 4: "Add_Term.php" page

Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and discussion - Brainstorming	
Design interface input page term.		
 Write PHP code to include My Page Header & Connection. 	Teaching aids	
■ Create a page of "enter the term"	Electronic board - Student's Book presentation	

Warm up / How can you create a web pages and save them to the location on your computer folder?



→Interface design input page term:

Through one of the applications used to create web pages (such as Expression Web) you can create a page with the following design entry term:



- \rightarrow you can write texts as in the previous screen and the use of "Toolbox" on top right of the screen to insert the controls on the page.
- ightarrow The " Form " is used to pass or send all the form data in control tools of the Web browser to the Webserver. There are two ways to send the form data, namely:
- <form method="GET">
- <form method="POST">
- → Where we can adjust Method property with the value POST or GET.
 - > Differences between the values (POST) and (GET):

Get	Post
Transmitted data appear in the "URL" page address.	Transmitted data do not appear in the "URL" page address.
They are not used to send secret or any important data words.	They are used to send secret or any important data words.
It has a limit of the data used up to Its Maximum data used is up to 8 Mb 7607 Character symbols.	Its Maximum data used is up to 8 Mb

Evaluation: -

Complete: They are used to send secret or any important data words.

Date			
Session			
Class			





Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and discussion - practical learning	
Design interface input page term.		
 Write PHP code to include My Page Header & Connection. 	Teaching aids	
Create a page of "enter the term"	Electronic board - Student's Book - - presentation	

Warm up / How can you create a web pages and save them to the location on your computer folder?



→ Writing PHP code:

- To connect to the database.
- Verify typing data in the controls on the web page.
- Register term data in the database table through PHP code:

```
48
         include("connection.php");
                                                                         Conditional clause to
49
             if(isset($ POST['Submit1']))
                                                                         check for pic folder
50
                      if(!is\_dir('pic')) \  \  \{ \  \, mkdir('pic'); \  \, \}
51
                                                                         created in case of non-
              @$file=$ FILES['File1']['name'];
                                                                         existence
             @$tmp=$_FILES['File1']['tmp_name'];
53
                      if(!empty($file)) { move uploaded file($tmp,'pic/'.$file);
55
               $term=$ POST['txt term'];
                                                              It is conditional clause check ifwe
               $trans=$ POST['trans'];
56
                                                              selected image file
               $defe=$ POST['TextAreal'];
               Spicture="pic/" . Sfile . " ";
58
               if ( Sterm !== "" && Strans !== "" && Sdefe !== "" && !empty(Sfile) )
59
60
61
                 mysql query("SET NAMES 'utf8"");
                 Squery=mysql_query("insert into terms values(",'$term','$trans','$defe','$picture')");
62
63
                      if($query)
64
                           "تم اضاقة البيانات بنجاح"=$datares
65
                           echo("<|abel id="Label1" style='color: #FF0000;font-size: x-large;"> $datares </label> ");
66
67
68
                      else
69
                           "لم يتم اضافة البيانات"=$datares:
70
                           echo("<label1' style='color: #FF0000;font-size: x-large;'> $datares </label> ");
                    :" البيانات التي تم إدخالها غير صحيحة يجب إدخال جميع الحقول"=$datares:
                    echo("<label id='Label1' style='color: #FF0000;font-size: x-large;'> $datares </label>
```

Evaluation: -

Complete: They are not used to send secret or any important data words.

Date			
Session			
Class			

Unit 3: Creating Site Pages
Lesson 6: Follow "Add_Term.php"
page



Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and	
Design interface input page term.	discussion - practical learning	
 Write PHP code to include My Page Header & Connection. 	Teaching aids	
Create a page of "enter the term"	Electronic board - Student's Book presentation	

Warm up / How can you create a web pages and save them to the location on your computer folder?



→ Executing "Add term page"

On browsing "enter term page" in the internet browser, the page appears and through the following address:

localhost/dictionary/add_term.php:



If you do not enter data and you click the "Add" button, the message "the data entered are incorrect. You must enter all fields, "is displayed below he the browser screen as follows:



Be sure to add the term to the database

To make sure that you insert data to a new record in the database, open the database in a new tab Internet browser by typing the following link "localhost / phpmyadmin" in the address bar and make sure insert a new record in the "terms table

Evaluation: -

Evaluate student's project.

Date			
Session			
Class			

General Review



Learning Objectives:	Strategy	
By the end of the lesson, the student should be able to:	Corporative learning - Dialogue and	
Identify the most important terms of the lesson.	discussion	
 Solve the student's book exercises. Write the project's code in right way. 	Teaching aids	
- write the project's code in right way.	Electronic board - Student's Book - - presentation	

Warm up / What are the most important concepts for these term?



/ A	\ OI	Allera a service	
ıΔ	IL INCOSE	THE COR	ect answer:
\ / \	, O IIOOOC		COLUITOWOI.

1. The programs that we used without cost called......

(Freeware – open source programs – copy right)

2. We can view code ofand we can edit, develop and publish it after editing.

(Freeware – open source programs – copy right)

- 3. The extension of static web page is(asp php html)
- 4. The web page that we can process page such as return value or view message or result called......

(Static web page – dynamic web page – home page)

5. The web page where we can create account called

(Static web page – dynamic web page – both)

6. The computer of high specifications from another computers in the network and it can controlled them called......

(Hardware server – software server – web server)

7. The task of one of the computers in network called

(Hardware server – software server – web server)

8. The computer which we stored web pages on of the network called......

(mail server – print server – web server)

9. The computer connected to printer and control the management of printing of the network called......

(mail server – print server – web server)

10. The computer which we stored electronic mail on and control the management of electronic mail processing called......

(mail server – print server – database server)

11. The computer which we stored database on and control the management of dealing of computers of the network with database called......

(mail server – print server – database server)

Evaluation: -

Evaluate student's answer